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10/083,326	02/26/2002	James W. O'Toole JR.	CIS01-39(5199)	4099

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EXAMINER

DOAN, DUYEN MY

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/083,326	Applicant(s) O'TOOLE ET AL.	
	Examiner Duyen M. Doan	Art Unit 2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 9-13, 14-15, 17-28, 30-35 is/are rejected.
- 7) ☒ Claim(s) 3-8, 16 and 29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detail Action

Claims 1-35 are presented for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Examiner wasn't sure what applicant meant by **"before a node in the network that receives the location request message cancels propagation of the location request message and produces a location signature message that is returned to the location requesting device"**. Appropriate correction required.

Allowable Subject Matter

Claims 3-8, 16, 29 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The prior art of record single or in combination failed to teach the combination of the invention as claimed in dependent claims 3-8,16,29.

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For example it fails to teach "calculating a value for time to return identifier based upon a propagation distance between the location requesting device and the target device, the value for the time to return identifier indicating a metric that determines how close the location request message is propagated in the network towards the target device, cancel the propagation of location of request message and produces a location signature message that is returned to the location requesting device".

The Dependent claims 4-8 further limit the dependent claim 3 and are considered objectable on the same basis as the dependent claim 3 as well as for the further limitations set forth.

Claims 16, 29 are objected based on similar reasons as claim 3.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 9-13, 14-15, 17-28, 30-35 rejected under 35 U.S.C. 102(b) as being anticipated by Evans et al (us pat 6327535) (hereinafter Evans).

As regarding claim 1, Evans discloses transmitting a location request message onto a network towards the target device, the location request message requesting location information in relation to the target device (col.5, lines 29-64; col.7, lines 1-43; col.9,

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lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21); receiving a location signature message, the location signature message containing location information associated with a plurality of different location information services, each location information service providing location information having a different location granularity in relation to the target device (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21); and processing the location information for at least one of the location information services in the location signature message to derive a location of the target device in relation to at least one desired location granularity (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 2, Evans discloses the location request message contains a specification of location information parameters that identify different types of location information requested by the location request message, each different type of location information corresponding to location information that can be provided from a different location information service (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 9, Evans discloses wherein the location signature message contains location information inserted into the location signature message from a plurality of different nodes in a communications network, each node having a different

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location proximity to the target device (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 10, Evans discloses the location information inserted into the location signature message is location information obtained from each node: i) at which the location request message is received on a network path from the location requesting device to the target device (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21); ii) which is capable of responding to the location request message with a location signature message (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21); and iii) for which location information is accessible by that node from a respective location information service that corresponds to a respective location information parameter specified in the location request message (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 11, Evans discloses retrieving, from the location signature message, first location information having a first location granularity in relation to the target device (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21); retrieving, from the location signature message, second location information having a second location granularity in relation to the target device (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67;

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col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21); analyzing the first location information and the second location information to determine a location of the target device based on the first and second location information (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 12, Evans discloses the location request message includes a specification of location information parameters that identify location information that may be available from location information services to nodes in the network existing on a path between the location requesting device and the target device (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21); and wherein the location signature message contains location information corresponding to respective location parameters that have a value indicating that the location requesting device is requesting that location information and for which nodes in the network existing on the path between the location requesting device and the target device are capable of access the location information from a location information service corresponding to the respective location parameters (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 13, Evans discloses the different portions of location information corresponding to different location information services provide different location

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granularities with respect to the location of the target device, the different location granularities including at least one of postal location information, phone number information, global positioning information, and network location information (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 14, Evans discloses detecting a requirement to provide location information on behalf of a location requesting (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21); in response to the step of detecting, creating a location signature message, the location signature message containing location information associated with a plurality of location information services accessible to the node, each location information service providing location information having a different location granularity in relation to a target device (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21); and forwarding the location signature message onto the network to a location signature message destination (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 15, Evans discloses receiving, on the network, a location request message containing a specification of location information parameters that identify different types of location information, that can be provided from different location

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information services, and which, if accessible to the node, are to be inserted into a location signature message for forwarding onto the network to the location signature message destination (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 17, Evans discloses detecting that the location request message includes an indication that separate location signature messages are to be sent to the location signature

message destination, and in response to the step of detecting, forwarding the location request message onto the network towards the target device specified by the target device identifier and proceeding to process the steps of creating a location signature message and forwarding the location signature message onto the network to a location signature message destination, such that the location signature message destination receives a separate location signature message

from each node that detects a requirement to provide location information (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 18, Evans discloses receiving a first location signature message, the first location signature message containing a specification of location information parameters that identify different types of location information, that can be provided from different location information services, and which, if accessible to the node, are to be

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inserted into the location signature message created in the step of creating for forwarding onto the network to the location signature message destination (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 19, Evans discloses obtaining second location information from each accessible location information service specified by a location information parameter in the specification of location information parameters contained in the first location signature message (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21); combining the first location information from the first location signature message and the second location information into a second location signature message, such that the second location signature message contains location information in relation to the target device from the node and at least one previous node on a network path towards the location signature message destination (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 20, Evans discloses obtaining location information relative to the node from each accessible location information service specified in a specification of location information parameters; and inserting the location information from each accessible location information service into the location signature message (col.5, lines

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29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 21, Evans discloses placing an identity of the node into the location signature message in order to associate the location information obtained by the node for all location information services accessible to the node with the identity of the node (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 22, Evans discloses the location information obtained from each location information service corresponds to location information obtained from those location information services that are accessible to the node for each respective location information parameter specified in a specification of location information parameters (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 23, Evans discloses the location information obtained from different location information services provides a different granularity of location with respect to the location of the node in relation to the target device (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

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As regarding claim 24, Evans discloses obtaining at least one location information modification factor that corresponds to at least one location information service specified in the specification of location information parameters(col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21); and applying the at least one location information modification factor to corresponding location information obtained from the location information service in order to modify values of the location information from the location information service (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 25, Evans discloses associating a node signature to the location information contained in the location signature message such that the identity of the node associated with the location information can be verified by a recipient of the location information(col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 26, Evans discloses a destination of the location signature message is a location requesting device (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

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As regarding claim 27, Evans discloses a destination of the location signature message is a target device (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 28, Evans discloses wherein a destination of the location signature message is a beacon device (col.5, lines 29-64; col.7, lines 1-43; col.9, lines 64-67; col.10, lines 1-9; col.19, lines 29-64; col.20, lines 20-56; col.21, lines 6-21).

As regarding claim 30, the limitations are similar to claim 1, therefor rejected for the same rationale as claim 1.

As regarding claim 31, the limitations are similar to claim 1, therefor rejected for the same rationale as claim 1.

As regarding claim 32, the limitations are similar to claim 1, therefor rejected for the same rationale as claim 1.

As regarding claim 33, the limitations are similar to claim 1, therefor rejected for the same rationale as claim 1.

As regarding claim 34, the limitations are similar to claim 1, therefor rejected for the same rationale as claim 1.

As regarding claim 35, the limitations are similar to claim 1, therefor rejected for the same rationale as claim 1.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duyen M. Doan whose telephone number is (571) 272-4226. The examiner can normally be reached on 9:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner
Duyen Doan
Art unit 2143



JEFFREY PWU
PRIMARY EXAMINER